Work Order ID 116572

April-17-14 12:52:52 PM

116572

Item ID: D4885-2 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: End Fitting

Start Date: 4/17/14 **Start Qty:** 1.00 *1*

Required Date: 5/02/14 **Req'd Qty:** 1.00 *1*

Reference:

Cust Item ID:

Customer:

Approvals: **Process Plan:** MLS **Date:** 4-04-17 **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr D4885	**Revision Nbr** Rev A								
100		0.00							
100						CL 14/04/22		1	
Outsource5	**Memo**	0.00							
Outsource process - Machining	ISSUE P/O: 23860 POSSIBLE SUPPLIER:ATG C OF C IS REQUIRED								
110	QC6- Inspect dimensions to drawing	0.00							
110						1			
QC	**Memo**	0.00							
Quality Control									
150		0.00							
150	PURCHASING					CL 4/10/25			
Purchasing	**Memo**	0.00							
Purchasing	Issue P/O: ~~23862~~ LPI Per ASTM 1417 LEVEL 2 Certificate of conformaty is required								

DAS 27 4/10/25

N/A done @ ATG

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- ☐ Rework
- ☐ Scrap
- ☐ Use-as-is
- ☐ Suspected Unapproved

AGAINST DEPARTMENT/PROCESS

- ☐ Skid-tube
- ☐ Machining
- ☐ Thermoforming
- ☐ Large Fab
- ☐ Crosstube
- ☐ Small Fab
- ☐ Finishing
- ☐ Composite
- ☐ Water Jet
- ☐ Prod. Eng. Coor.
- ☐ Rec/Store/Packaging
- ☐ Supplier
- ☐ Engineering
- ☐ Quality
- ☐ Other

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric
- ☐ Cracks
- ☐ Crimp/Kink/Ripple/Wave
- ☐ Cuffs
- ☐ Crushing
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Marks/Chatter
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damage/Defect
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drawing
- ☐ Drill Holes
- ☐ Finish
- ☐ Fit/Function
- ☐ Folio/Program
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete/Unqualified
- ☐ Instructions Incomplete/Unclear
- ☐ Misaligned/off center
- ☐ Mislabeled
- ☐ Misread
- ☐ Off-set
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Set-up
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other _____

Work Order ID 116572
April-17-14 12:52:52 PM

116572

Item ID: D4885-2 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: End Fitting
Start Date: 4/17/14 **Start Qty:** 1.00 *1*
Required Date: 5/02/14 **Req'd Qty:** 1.00 *1*
Reference:
Cust Item ID:
Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Receive & Inspect for Damage & Mat'l Certs	0.00							
160									
Packaging	**Memo**	0.00							
Packaging	Ensure certificate of conformity is attached								
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	**Memo**	0.00							
Quality Control									

4/4/20 C

ST126 1X SP14-6-25

MLJ 14-06-25

14.6.25

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

Picklist Print

April-17-14 12:52:56 PM

Work Order ID: 116572 *116572*

Parent Item: D4885-2 *D4885-2*

Parent Item Name: End Fitting

Start Date: 4/17/14 **Required Date:** 5/02/14

Start Qty: 1.00 **Required Qty:** 1.00

Comments: IPP REV:A NEW ISSUE 14-01-28 JLM VERIFIED BY:JFS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4885-2P		Purchased	No				Each	0.0000		1			
D4885-2P									**				
End Fitting													
M174PH-H900R2.000		Purchased	No				f	51.0458		1			
M174PH-H900R2.000									**				
17-4SS H900 ROUND BAR 2.000													

Location		Loc Qty	Loc Code
MAT031		51.0458	
	M128314	26.4	
	M128809	24.6458	

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

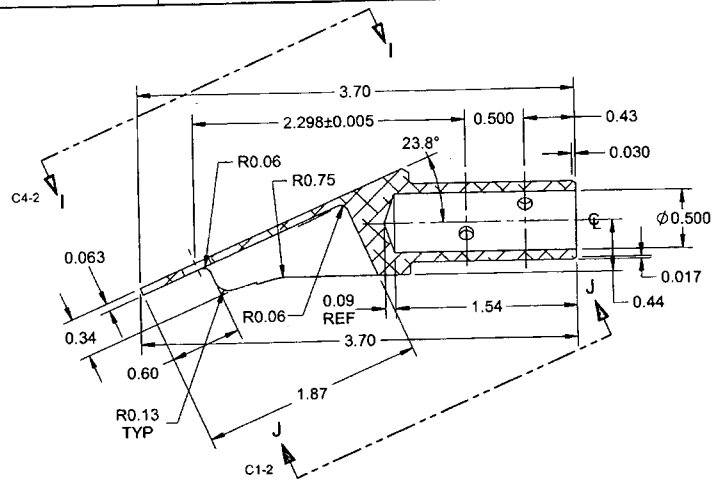
FAULT CATEGORY

Landing Gear

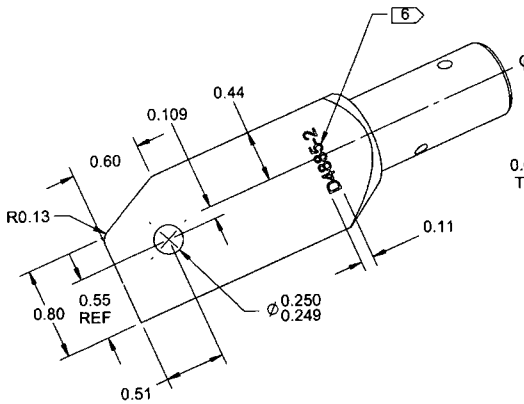
☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

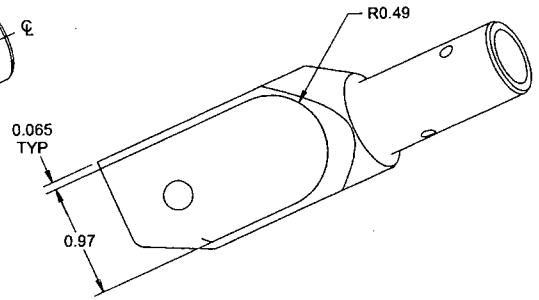
☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other



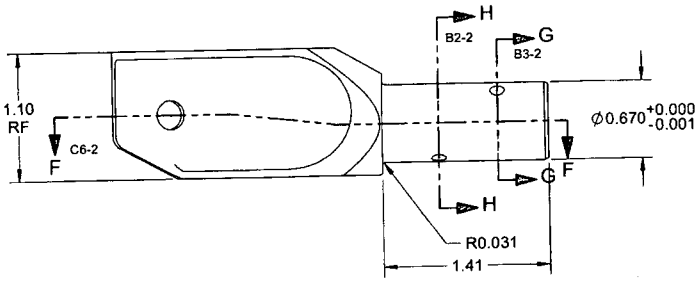
SECTION F-F B8-2

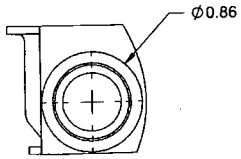


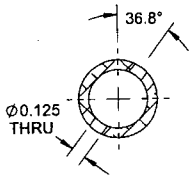
AUXILIARY VIEW I-I D8-2



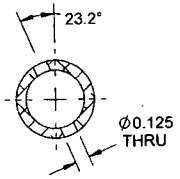
AUXILIARY VIEW J-J C7-2







SECTION G-G B6-6



SECTION H-H B6-6

D4885-2 END FITTING

NOTES:
1) MATERIAL: 17-4 PH/S17400/TYPE 630 SS ROUND BAR, H900 CONDITION
PER AMS 5643/ASTM A564
DART SPEC M17-4-R
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3.
ENGRAVE P/N USING 0.11 HIGH LETTERS TO A MAX. DEPTH OF 0.010
7) WEIGHT: 0.22 lbs
8) LIQUID PENETRANT INSPECT PER QSI 038 6.1.1 (ASTM E1417 LEVEL 2)

2013 -12- 12

APPROVED

DESIGN	RF	DART AEROSPACE LTD
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA
CHECKED	DC	DRAWING NO. D4885 REV. A
MFG. APPR.	JLM	SHEET 2 OF 5
APPROVED	HS	TITLE END FITTING SCALE NTS
DE APPR.	DS	
DATE	13.12.01	

COPYRIGHT © 2013 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD

116572 MLJ
14-04-17

DART AEROSPACE

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO23860

Purchase Order Date 4/17/2014
PO Print Date 4/22/2014

Order From : VC-ATG001

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE ROAD
ROCKLAND, ON K4K 1T2
CANADA

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone 613-446-4544

Ship To Contact
Ship To Phone
Ship Via: VENDOR'S TRUCK
Ship Acct:

Buyer Chantal Lavoie
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency CAD
FOB FCA – (Free Carrier)

16	D4885-2P	End Fitting	5/14/2014 Yes 5/14/2014	FN	1.00 Each		$96.00	$96.00

MACHINE AS PER DWG D4885 REV. A
B116572
MATERIAL: 174PH-H900R2.000 M128314

Line Total: **$96.00**

17	D4885-5P	End Fitting	5/14/2014 Yes 5/14/2014	FN	1.00 Each		$96.00	$96.00

MACHINE AS PER DWG D4885 REV. A
B116565
MATERIAL: 174PH-H900R2.000 M128314

Line Total: **$96.00**

18	D4885-7P	End Fitting	5/14/2014 Yes 5/14/2014	FN	2.00 Each		$96.00	$192.00

MACHINE AS PER DWG D4885 REV. A
B116567
MATERIAL: 174PH-H900R2.000 M128314

Note:

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE STREET
ROCKLAND, ON K4K 1T2
Canada

Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 908153 Date: 20-Jun-14

To

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613 632-9577 Fax: 613 632-1053

Ship To

CHANTAL LAVOIE
DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613 632-9577 Fax: 613 632-1053

Terms	Ship Via

Quantity	Description		
	PLEASE REFERENCE THE PACK LIST NUMBER ON ALL CORRESPONDENCE TO THIS SHIPMENT. IF YOU HAVE ANY QUESTIONS, PLEASE CALL AT (613) 446-4544.		
1 ea	Part: D4885-2P END FITTING Job: 16226	PO: PO23860	Rev: A Line: 16
2 ea	Part: D4885-7P END FITTING Job: 16228	PO: PO23860	Rev: A Line: 18
10 ea	Part: D4869-1P END FITTING, EYE Job: 16214	PO: PO23860	Rev: A Line: 3
4 ea	Part: D4869-3P END FITTING, EYE Job: 16215	PO: PO23860	Rev: A Line: 4
4 ea	Part: D4805-1P END FITTING Job: 16219	PO: PO23860	Rev: A Line: 8

DATE : 20 June 2014

CERTIFIED SIGNATURE: J Ayotte

RECEIVER SIGNATURE : _____

CERTIFICATE OF CONFORMANCE

A.T.G. INDUSTRIES INC. CERTIFIES THAT ALL ITEMS IN THIS SHIPMENT ARE IN CONFORMANCE WITH THE REQUIREMENTS, SPECIFICATIONS, AND DRAWINGS REFERENCED IN THE ABOVE PURCHASE ORDER.

I.S.O. 9001 : 2008 REGISTERED / MADE IN CANADA

First Article Inspection Report

ATG INDUSTRIES INC.

731 Industrielle St
Rockland, Ontario K4K 1T2
Ph: 613 446-4544

Customer:	**Dart Aerospace**	Date:	**June 20th, 2014**	**512**
Part Number:	**D4885-2P**	Revision:	**A**	
PO Number:	**PO23860**	Qty:	**1**	FAI No.

Item	Dimension	Measurement Inspected by: Rene Tougas, Q.C.	Remarks
1	3.70	3.699	Section F-F
2	2.298±.005	2.298	
3	R.06	.062	
4	R.75	.750	
5	23.8º	23.8º	
6	.500	.500	
7	.43	.429	
8	.030	.031	
9	Ø.500	.501	
10	.017	.018	
11	.44	.440	
12	1.54	1.54	
13	3.70	3.699	
14	.09 REF	.086	
15	R.06	.062	
16	1.87	1.871	
17	R.13	.125	
18	.60	.600	
19	.34	.346	
20	.063	.065	
21	.60	.600	Auxiliary View I-I
22	.109	.105	
23	.44	.445	
24	Note 6	✓	
25	.11	.100	
26	Ø.250/.249	.249	
27	.51	.512	
28	.80	.800	
29	.55 REF	.551	
30	R.13	.125	
31	.065 TYP	.062/.064	Auxiliary View J-J
32	R.49	.486	
33	.97	.972	

First Article Inspection Report

ATG INDUSTRIES INC.

731 Industrielle St
Rockland, Ontario K4K 1T2
Ph: 613 446-4544

Customer:	**Dart Aerospace**	Date:	**June 20th, 2014**	**512**
Part Number:	**D4885-2P**	Revision:	**A**	
PO Number:	**PO23860**	Qty:	**1**	FAI No.

Item	Dimension	Measurement Inspected by: Rene Tougas, Q.C.	Remarks
34	Ø.670+.000/-.001	.6696	
35	1.41	1.411	
36	R.031	.031	
37	1.10 REF	1.099	
38	Ø.86	.864	
39	36.8º	37.0º	Section G-G
40	Ø.125 thru	.125	
41	23.2º	23.0º	Section H-H
42	Ø.125 thru	.125	
43	Material:	17-4SS H900 2.00" RD BAR	Supplied by Customer
44	Treatment:	Liquid Penetrant	PO#: 20140224

skyservice Work Order Traveler

Sky Service F.B.O. Inc.

DOT APP 53-89 / EASA 145.7142 / BDA AMO 385

WO #: MWO21208	**Customer:** ATG Industries Inc	**Dept:** NDT YUL	**Reference:** 20140224
Descr:	**PN:**	**S/N:**	**Qty:** 1
Make:	**Model:**	**Reg:**	**A/C S/N:**
TSN: 0	**CSN:** 0	**TSO:** 0	

Task: UNSCHEDULED | **Sequence:** 1

Work Required:

CARRY OUT NDT ON 55 PARTS AS PER PO : 20140224

Action Taken:	Date:	Initial/Stamp:
LPI C/O AS PER ASTM E-1417M-13 NO CRACK FOUND DAS 27 ~~9-89~~ 04/04/28 PEN.(ZL-37 , B#10A070), CLEAN(SKC-S,B#09F21K),DEV.(SKD-S2,B#09L04K) EMU.(ZR-10B,B#10A074).	JUN 17 2014	DOT APP 20 53-89

Description	*Location*	*P/N*	*Qty*	*Batch*	*S/N Off*	*S/N On*

COPY

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature:	**ACA/SCA Stamp**	Date:
Name: RAFIK MELIKIAN	DOT APP 20 53-89	JUN 17 2014